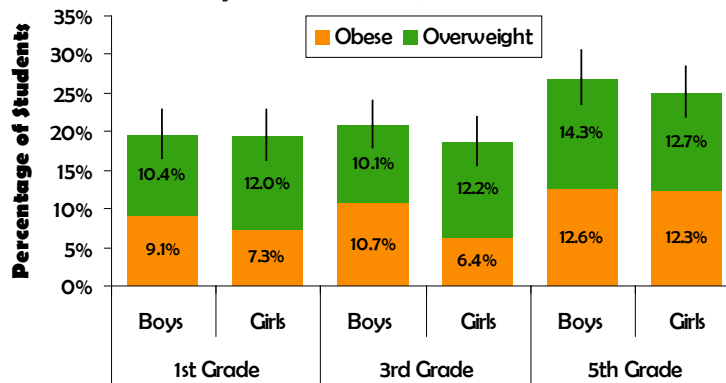


Childhood Overweight in Utah, 2008

From January to May 2008, 4,123 1st, 3rd, and 5th grade students from 69 randomly selected public elementary schools throughout the state were weighed and measured to assess the extent of childhood overweight and obesity in Utah. Except for two schools that had closed, the same schools were sampled in 2006. The data were collected to be representative of all public elementary schools in Utah. This ongoing study was conducted by the Utah Department of Health, local school districts, and school nurses. Findings from the study are as follows:

Figure 1.

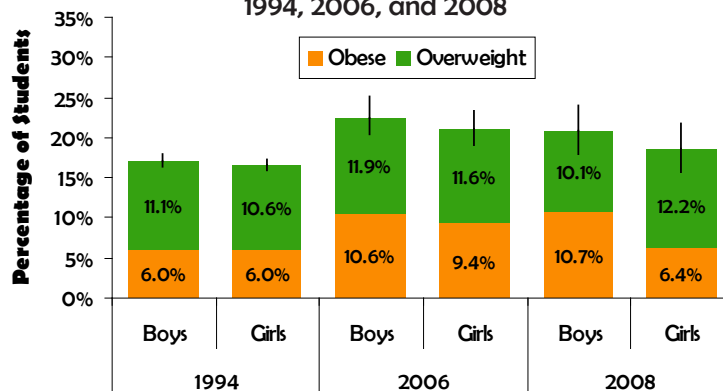
Percentage of Students Obese* or Overweight[†] by Grade and Sex, Utah 2008



Source: 2008 Utah Height/Weight Study, Utah Department of Health.

Figure 2.

Percentage of 3rd Grade Students Obese* or Overweight[†], Utah 1994, 2006, and 2008



Source: 1994 Bureau of Health Promotion, Heart Disease and Stroke Prevention Program and 2006 and 2008 Utah Height/Weight Study, Utah Department of Health.

- More boys were overweight or obese at every grade.
- The percentage of overweight or obese students increased dramatically between the 3rd and 5th grades.
- In 2008, 21.5% of elementary school students were at an unhealthy weight. The rate in 2006 was similar at 22.5%.
- In 2008, 9.7% of elementary school students were obese, similar to 2006 when 10.3% were obese.
- In 1994, 16.9% of 3rd graders were at an unhealthy weight. In 2008, it increased to 19.7%, a 17% increase.
- There was no evidence that the rate of overweight and obesity among elementary school students increased between 2006 and 2008.

Body Weight Terminology:

Body Mass Index (BMI) is a standardized measurement based on height and weight that is used to estimate the amount of body fat for an individual.

Classification of Unhealthy Weight (Barlow 2007)

[†]Overweight BMI ≥ 85th and < 95th percentile for age and gender

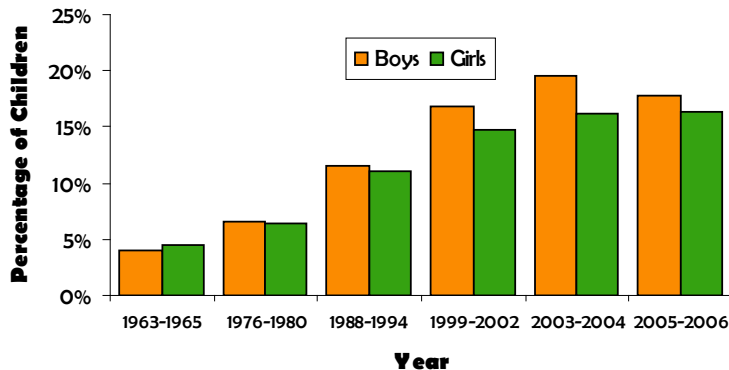
*Obese BMI ≥ 95th percentile for age and gender

Reports prior to 2008 classified children as “at risk for overweight” with a BMI ≥ 85th and < 95th percentile, and “overweight” with BMI ≥ 95th.

National Data for Children:

Figure 3.

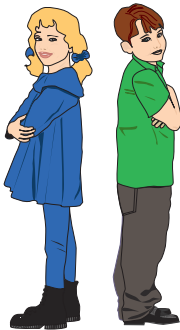
**Obesity Among Children 6 to 19 Years of Age,
National Data from NHANES Survey**



Source: National Health and Nutrition Examination Survey (1963-1965, 1976-1980, 1988-1994, 1999-2002, 2003-2004, and 2005-2006).

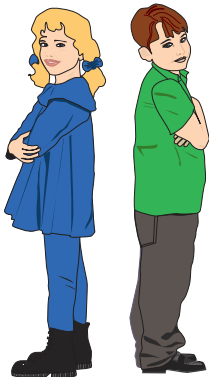
National data for children show an increase in body weight over time.

- A continued increase in percentage of obese children was observed.
- More boys are obese compared to girls.
- Percentage of obese children has more than doubled since the 1960s.
- The proportional increase is greater for older children.



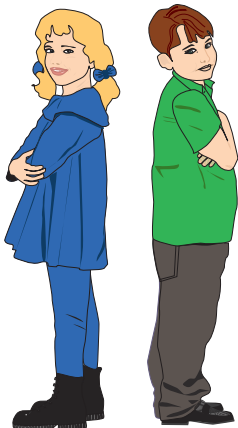
First Graders' (6-Year-Old Children) Weight Has Increased 4.9% in 30 Years

- In 1963-1965 the average boy was 46.7 inches tall and weighed 48.4 lbs
- In 2005-2006 the average boy was 47.7 inches tall and weighed 54.0 lbs
- In 1963-1965 the average girl was 46.4 inches tall and weighed 47.4 lbs
- In 2005-2006 the average girl was 46.9 inches tall and weighed 51.5 lbs
- Body weight has increased 11.6% over 30 years for boys
- Body weight has increased 8.7% over 30 years for girls



Third Graders' (8-Year-Old Children) Weight Has Increased 16.8% in 30 Years

- In 1963-1965 the average boy was 51.2 inches tall and weighed 61.1 lbs
- In 2005-2006 the average boy was 51.4 inches tall and weighed 67.1 lbs
- In 1963-1965 the average girl was 50.9 inches tall and weighed 60.6 lbs
- In 2005-2006 the average girl was 51.5 inches tall and weighed 66.5 lbs
- Body weight has increased 9.8% over 30 years for boys
- Body weight has increased 9.7% over 30 years for girls



Fifth Graders' (10-Year-Old Children) Weight Has Increased 14.0% in 30 Years

- In 1963-1965 the average boy was 55.2 inches tall and weighed 74.2 lbs
- In 2005-2006 the average boy was 55.9 inches tall and weighed 87.4 lbs
- In 1963-1965 the average girl was 55.5 inches tall and weighed 77.4 lbs
- In 2005-2006 the average girl was 56.3 inches tall and weighed 89.7 lbs
- Body weight has increased 17.8% over 30 years for boys
- Body weight has increased 15.9% over 30 years for girls

Source: National Health and Nutrition Examination Survey (1963-191965 and 2005-2006).

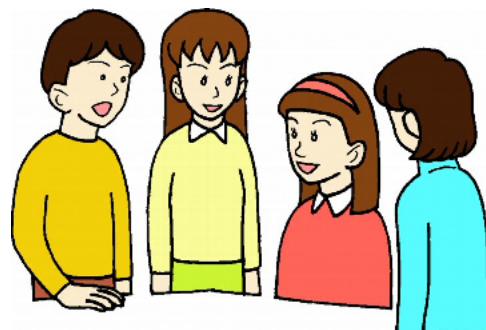
The Effects of Childhood Overweight:

Childhood overweight predicts obesity later in life

- 80% of children who were overweight at any time during the elementary period were overweight at 12 years of age (Nader, 2006)

Adult diseases now observed in overweight children

- Hardening of arteries, high blood pressure, and high cholesterol, which can lead to heart disease (Baker, 2007; Barlow, 2007; Weiss, 2004; Cabrinety, 2002; Freedman, 1999; Berensen, 1998)
- Diabetes (Barlow, 2007; Weiss, 2004; Pinhas-Hamiel, 1996)
- Glucose intolerance (Shinha, 2002)
- Sleep-associated breathing disorders (Baker, 2007; Barlow, 2007; Mallory, 1989)
- Non-alcoholic Fatty Liver Disease (NAFLD) (Barlow, 2007)



Social and psychological impact of childhood overweight

- Social isolation (Strauss, 2003)
- Increased rate of suicidal thoughts and attempts associated with weight-based teasing (Puhl, 2007; Eisenberg, 2003)
- Low self-esteem due to poor body image (Strauss, 2000)
- Increased rate of anxiety disorders and depression in overweight children (Gable, 2008; Barlow, 2007; Puhl, 2007; Anderson, 2006)
- Increased likelihood to report difficulties in school (Gable, 2008; Puhl, 2007; Schwimmer, 2003)
- Reduced self-assessed quality of life (Puhl, 2007; Williams, 2005)

“Because of the increasing rates of obesity, unhealthy eating habits, and physical inactivity, we may see the first generation that will be less healthy and have a shorter life expectancy than their parents.”

US Surgeon General Richard Carmona, March 2004

How can we impact children's lives to change this trend?

We can change this trend by working with:



Families



Health Care



Schools



Media



Communities



Government



Worksites

In 2006, Governor Jon M. Huntsman, Jr. released the *Utah Blueprint to Promote Healthy Weight in Children, Youth, and Adults*. Objectives and strategies for each of the above groups are included. This document is found on the Internet at www.health.utah.gov/obesity/docs/obesityblueprint.pdf.

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Resources:

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- Obesity in Utah Web site. Utah Department of Health, Bureau of Health Promotion. Located on the Internet at <http://health.utah.gov/obesity/>
- Check Your Health. Utah Department of Health, Intermountain Healthcare, and KUTV Channel 2 News. Located on the Internet at <http://www.checkyourhealth.org/>

Acknowledgments:

The Utah Department of Health would like to recognize the following school districts for their participation in the collection of statewide data: Alpine, Box Elder, Cache, Davis, Emery, Granite, Jordan, Murray, North Sanpete, Nebo, Ogden, Park City, Piute, Provo, South Sanpete, South Summit, Salt Lake City, Tintic, Tooele, Uintah, Wasatch, Washington, and Weber.

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